Miscellaneous Notes on the East-Asiatic Pteridophytes with special reference to the Japanese Species

By

Motozi Tagawa

田川基二: 東亞羊齒植物雜考(其五)

Dryopteris lacera (THUNB.) O. KTZE.

var. peninsulæ (Kitagawa) Tagawa, comb. nov.

Dryopteris peninsulæ Kitagawa in Rep. First Sci. Exped. Manch. IV-2. 54. fig. 10 (1935).

Varietus stipite rachideque minus squamatis, lamina basi latissima, pinnis superioribus abundanter soriferis nunquam contractis, pinnulis obtusis ve! rotundatis a typo diversa.

Nom. Jap. Mansyû-kumawarabi.

Hab. Manchuria. Prov. Fêng-t'ien: in monte Lao-t'ieh-shan (M. Kobayası l Aug. 16, 1931; June 20, 1934; July 18. 1937).

Dryopteris peninsulæ KITAGAWA is a local variety of D. lacera O. KTZE., differing from the type in some weak characters mentioned above, and is found at the northern extremity of the range of D. lacera O. KTZE. In typical D. lacera O. KTZE. stipe and rachis are densely scaly, lamina is slightly narrowed below, pinnules are mostly acutish, and sori are confined to the apical part of the frond, occupying nearly the whole of the contracted pinnæ.

60. Dryopteris saxifraga H. Itô in Bot. Mag. Tokyo 50: 125 (1936).

Dryopteris varia (non O. KTZE.) KITAGAWA in Rep. First Sci. Exped. Manch. IV-2.55 (1935).

Nom. Jap. Iwa-itatisida.

Hab. Manchuria. Prov. Fêng-t'ien: in monte Fêng-huang-shan (M. Ko-BAYASI! July 29, 1931).

A new addition to the flora of Manchuria.

ystichum spinescens Tagawa sp. nov.

Rhizoma erecto-ascendens, apice dense squamatum, frondibus caespitosis. Stipes 4–8 cm longus, squamis ferrugineis ovato-oblongis usque linearibus apice acuminatis margine irregulariter ciliato-denticulatis ad 10 mm longis 4 mm latis densissime vestitus. Lamina anguste triangulari-lanceolata, basi latissima truncata, versus apicem sensim attenuata acuminata, 12–14 cm longa, 2.5–3 cm basi lata, crasse coriacea, bipinnata; rachide squamis anguste lanceolatis usque fibrillosis dense vestita, nunquam gemmifera; pinnis patentibus, imbricatis, oblique deltoideo-ovatis, apice acutis vel obtusiusculis pungentibus, basi oblique truncatis brevissime petiolatis, pinnatis parte superiore pinnatifidis, superne glabris ad costam tenuiter sulcatis, inferne squamis linearibus usque fibrillosis parce dispersis, inferioribus 1.5–2 cm longis, 1–1.5 cm basi latis; pinnulis 3–4–jugis, ovatis vel late ovatis, apice pungentibus, inferioribus sessilibus margine dentibus pungentibus 1–2 utrinque instructis, superioribus adnatis integris, venis venulisque non visis. Sori mediales, indusiis ca. 1 mm diametro, margine erosis.

Nom. Jap. Toge-inode, nom. nov.

Hab. Formosa. Prov. Kwarenkô: inter Sekigahara et Gôkwan, alt. 2600-2900 m (M. Tagawa, Nos. 831 (Type), 863! Sept. 10, 1934. Type in Herb. Kyôto Imp. Univ.).

In size, shape, texture, and habit this is exceedingly like *Polystichum horridipinnum* HAYATA, but larger scales on stipe are ovate-oblong, and veins and veinlets are invisible and not depressed on under surface of pinna. In *P. horridipinnum* HAYATA larger scales on stipe are broadly ovate, and veins and veinlets are depressed and visible on under surface of pinna. Lamina of the new species is broadest at base, but of *P. horridipinnum* HAYATA is usually slightly narrowed below.

62. Tectaria (Sagenia) Fauriei Tagawa, sp. nov.

Sagenia Fauriei TAGAWA in sched.

Rhizoma crassum, erectum, apice dense squamatum, frondibus caespitosis, erectis. Stipes 40-60 cm longus, ca. 5 mm medio latus, rubro-brunneus, a medio sursum anguste alatus, basi paleis fuscis lineari-lanceolatis longe acu-

minatis integris ad 10 mm vel ultra longis dense præditus, sursum subnudus. Lamina in ambitu late ovata, ca. 50 cm longa et 30 cm supra basin lata, pinnata, herbacea, superne glabra, inferne ad costas venosque pinnarum sparse puberula: rachide rubro-brunnea, utrinque glabra, anguste alata, ad axillas pinnarum gemmis dense paleaceis radiciferisque ornata, ala supra axillas pinnarum interrupta; pinnis lateralibus 3-jugis, oppositis vel alternis, erecto-patentibus, 10-14 cm inter se remotis, oblongo-lanceolatis, integris, apice abrupte breviter caudato-acuminatis, ad basin leviter attenuatis, basi latere anteriore non adnatis, latere posteriore longe decurrentibus, pinnis infimis maximis, 20-30 cm longis, 4-9 cm latis, latere posteriore distantia ca. 3-5 cm a loco insertionis uniauriculatis (auriculis pinnis similibus sed minoribus), pinnis sequentibus gradatim minoribus, supremis 10-20 cm longis, 7-10 cm latis, basi ad pinnas supremas adnatis; costis inferne valde elevatis, rubrobrunneis, venis lateralibus principalibus distinctis, arcuatis, ad marginem non attingentibus, mediis 7-10 mm inter se remotis. Sori parvi, rotundati, ca. 1 mm lati, inter venas laterales principales multiseriatim dispositi, terminales vel compitales, non paraphisiati, indusiis rotundato-reniformibus, integris, glabris, sporis polygono-reticulatis.

Nom. Jap. Komoti-nanabakesida, nom. nov.

'Hab. Formosa. Prov. Takao: Bankinsing, alt 800 m (U. Faurie, No. 67! Feb. 1914. Type in Herb. Kyôto Imp. Univ.).

Lamina is rarely trifoliolate. Stipe 43 cm long, central pinna lanceolate, 38 cm long, 8.5 cm broad at the middle, abruptly short-caudate-acuminate, gradually narrowed below, sessile, lateral pinnæ broadly lanceolate, ascending, not auricled, 20 cm long by 7 cm broad, acuminate, obtuse at the base, long decurrent to stipe.

This species is somewhat resembling Tectaria vasta(BL.)Copel., but is quite different in several characters: -Stipe winged only on upper half, rachis glabrous on upper surface, producing scaly buds in the axils of rachis and pinnæ, pinne abruptly short-caudate-acuminate, not connected by the wing of rachis (i. e. wing interrupted above the axils of pinnæ), sori terminal or compital. In T. vasta Copel. stipe is winged almost to the base, rachis never gemmiferous, hairy on upper surface, all pinnæ connected by the wing of rachis, acuminate, sori dorsal or compital.

6 . Athyrium Conilii (Fr. et Sav.) Tagawa, comb. nov.

Asplenium Conilii Fr. et Sav., Enum. Pl. Jap. 2: 227 (1876), 623 (1879).

Diplazium japonicum Bedp. var. Conilii Makino in Bot. Mag. Tokyo 20: 32 (1906).

Diplazium Conilii Makino in Bot. Mag. Tokyo **27**: 253 (1913); Nakai in Bot. Mag. Tokyo **39**: 111 (1925); Makino et Nemoto, Fl. Jap. 1601 (1925); OGATA, Ic. Fil. Jap. **6**, pl. 263 (1935).

Asplenium japonicum Thunb. γ. coreanum Hook. et Bak., Syn. Fil. 235 (1868).

Diplazium japonicum Bedd. var. latipes Rosenst. in Fedde, Repert. 13: 126 (1914).

Diplazium japonicum (non Bedd.) Matsum., Ind. Pl. Jap. 1:303 (1904), p.p. Diplazium Oldhami Christ apud Léveillé in Bull. Acad. Int. Géogr. Bot. sér. 2. 19:6 (1910); Nakai, Fl. Kor. 2:409 (1911).

Nom. Jap. Hosoba-sikesida.

Hab. Honsyû, Sikoku, Kyûsyû and Korea.

Diplazium japonicum BEDD. var. latipes ROSENST. is only a form with the basal pinnæ conspicuously longer than the others.

var. Oldhami (Hook. et Bak.) Tagawa, comb. nov.

Asplenium japonicum Thunb. var. Oldhami Hook. et Bak., l. c.; Fr. et Sav., l.c. 235.

Diplazium Oldhami Christ in Bull. Herb. Boiss. 7: 819 (1899); MASTUM., l. c. 304; Makino et Nemoto, l. c. 1605; Miyabe et Kudo, Fl. Hokk. Saghal. 32 (1930).

Diplazium japonicum Bedd. var. Oldhami C. Chr., Ind. Fil. 236 (1905).

Diplazium Conilii Mak. var. Oldhami Nakai in Bot. Mag. Tokyo 39: 112 (1925).

Hab. Hokkaidô, Honsyû and Korea.

64. Athyrium dimorphophyllum (Koidz.) Tagawa, comb. nov.

Diplazium dimorphophyllum Koidz. in Mayebara, Fl. Austro-Higoensis 3

(1931); in Acta Phytotax. Geobot. 1: 27 (1932).

Nom. Jap. Seitaka-sikesida.

Hab. Honsyû. Prov. Yamasiro: Mt. Kurama near Kyôto (G. Koidzumi! Nov. 16, 1929. Type in Herb. Kyôto Imp. Univ.). Prov. Suruga: Setonoyamura (D. Simizu! Oct. 20, 1929). Prov. Kii: Mitogawa (M. Tagawa, No. 595: Oct. 16, 1930). Prov. Ise: Sakanosita-mura (T. Kurokawa! Aug. 28, 1932).

Sikoku. Prov. Iyo: Asahi-mura (T. Watanabe! Oct. 2, 1932). Prov. Tosa: Kamibun-mura (T. Watanabe! Oct. 16, 1932).

Kyûsyû. Prov. Buzen: Misato-mura (K. Ікеве! Nov. 6, 1929). Prov. Higo: Aida (K. Мачевака, No. 725! July 13, 1930).

The specimen collected by Prof. Koidzumi at Mt. Kurama may be selected as the type, because it is most typical.

65. Athyrium kiusianum (Koidz.) Tagawa, comb. nov.

Diplazium kiusianum Koidz. in Mayebara, Fl. Austro-Higoensis 3 (1931); in Acta Phytotax. Geobot. 1:27 (1932).

Nom. Jap. Mukuge-sikesida.

Hab. Kyûsyû. Prov. Hyûga: Masaki (K. MAYEBARA, Nos. 348, 626 (Type), 657! June 12, 1927. Type in Herb. Kyôto Imp. Univ.). Prov. Higo: Hitoyosi (K. MAYEBARA, No. 658! Aug. 2, 1929; No. 719! July 6, 1930); Mizukami-goe (K. MAYEBARA, No. 696! June 2, 1930).

Prof. Koidzumi does not indicate the type, but Mayebara No. 626 is chosen as the type, because it is most typical.

Athyrium japonicum (Thunb.) Copel. and its allies have been merged into Diplazium only because they have diplazioid sori. It seems to be better way to place this and the last two species in Athyrium, considering on other characters as well as sori.

66. Athyrium coreanum Christ in Bull. Herb. Boiss. sér. 2. 2: 827(1902); NAKAI, Fl. Kor. 2: 405 (1911); in Bot. Mag. Tokyo 43: 5 (1929); Kom. et Klob.-Alisova, Key Pl. Far East. Reg. USSR. 1: 75 (1931); KITAGAWA in Rep. First Sci. Exped. Manch. IV-2. 73 (1935).

Athyrium decursivum Yabe in Bot. Mag. Tokyo 17:66 (1903); Nakai, Fl. Kor. 2:405 (1911).

Rhizoma breviter repens. Stipes 20–50 cm longus, stramineus, ad basin squamis membranaceis lanceolatis ca. 1 cm longis acuminatis integris pallide brunneis vel fuscis vestitus, sursum glaber. Lamina lanceolata oblongo-lanceolata vel ovato-lanceolata, 30–60 cm longa, 15–25 cm lata, apice acuminata, versus basin saepe leviter angustata, bipinnati-partita, herbacea; rachide in sicco straminea, molliter crispato-puberula dein glabrescente; pinnis patentibus vel leviter ascendentibus, linearibus, apice acuminatis, basi truncatis sessilibus, pinnati-partitis, superne glabris raro ad costam puberulis, inferne glabris vel ad costam costulamque parce puberulis, inferioribus 10–15 cm longis, 2–3 cm latis; pinnulis patentibus, anguste oblongis, apice obtusis vel subrotundatis, basi plus minusve dilatatis, margine crenato-serratis usque crenato-lobatis, venis bifurcatis vel simplicibus, pinnulis mediis pinnarum inferiorum 1–2 cm longis, 3–7 mm latis. Sori subcostales, leviter curvati asplenioidei, vel hamati athyrioidei, rarissime diplazioidei, indusiis integris, sporis ovato-ellipsoideis, rugoso-plicatis.

Nom. Jap. Kôrai-inuwarabi, Tani-mesida.

Hab. Manchuria. Prov. Fêng-t'ien: in monte Fêng-huang-shan (M. Ko-BAYASI! Aug. 8, 1930; July 29, 1931).

Korea. Kan Ouen To (U. Faurie! June 28, 1901. Cotype of A. coreanum Christ). Prov. Keiki: in monte Peuk-hansan (T. Uchiyama! Oct. 14, 1900. Cotype of A. decursivum Yabe); Kôryô (G. Koidzumi! Aug. 1932). Prov. Zennan: Mt. Sôkei-zan, Zyunten-gun (K. T. Tyô, No. 153! July 17, 1936). Prov. Keinan: Mt. Tii-san (S. Hatusima, No. 285! July 19, 1933).

Kyûsyû. Prov. Tusima: Mt. Mitake, Nita-mura (K. Nakasima. Nos. 186, 187! Aug. 1934; Z. Tasiro! Aug. 12, 1935). Prov. Buzen: Mt. Omoto-san near Usa (a certain Watanabe! Date unknown).

Honsyû. Prov. Simotuke: Siobara (H. Sekimoto! Sept. 4, 1917).

Distr. Eastern Siberia, Southern Manchuria, Korea, Kyûsyû, and Honsyû.

This is the closest ally of Athyrium pterorachis Christ, but differs from it by the smaller frond with less scaly stipe and narrower pinnæ, and the less cut pinnules with mostly simple or bifurcate veins. The range of A. pterorachis Christ is from the central part of Honsvû, northwords to Hokkaidô,

Kuriles and Kamchatka.

67. Diplazium Kanasiroi Tagawa, sp. nov.

? Diplazium japonicum Bedd. var. yaoshanense Wu in Bull. Dept. Biol. Coll. Sci. Sun Yatsen Univ. No. 3. 152. pl. 67 (1932).

Rhizoma ignotum (verisimiliter repens, dense squamatum). Stipes 30-40 cm vel ultra longus, ut rachide griseo-stramineus glaber, ad basin piceam squamis linearibus rigidiusculis piceis margine parce denticulatis ad 7 mm longis vestitus. Lamina ovata late ovata vel triangulari-ovata, apice abrupte contracta longe candata, rigide herbacea, utrinque glabra, pinnota, praeter caudam 18-21 cm longa et 15-20 cm lata; cauda triangulari-lanceolata, ad apicem sensim attenuata, 10-13 cm longa, 3-4 cm basi lata, inferiore tenuiter pinnatifida, sursum grosse crenato-serrata; pinnis 7-8-jugis, anguste lanceolatis, a medio sursum gradatim attenuatis acuminatis, deorsum leviter attenuatis, basi oblique rotundatis nunquam truncatis breviter petiolatis, margine crenatoserratis nunquam pinnatifidis, serris obtusiusculis parce serrulatis, pinnis superioribus adnatis vel sessilibus, inferioribus maximis 10-12 cm longis, 2-2.5 cm medio latis, 2.5-3 cm inter se remotis; venis flexuosis, pinnatis, venulis ascendentibus simplicibus latere anteriore 2 posteriore 1-2 emittentibus. Sori lineares curvati, asplenioidei vel diplazioidei, ad 10 mm longi, parte inferiores venularum basalium anteriorum occupantes et longe a margine cessantes, indusiis membranaceis subintegris.

Nom. Jap. Hokozaki-nokogirisida, nom. nov.

Hab. Ryûkyû. Isl. Okinawa: Mt. Genka, Haneti-mura (T. Kanasıro, No. 61! Sept. 23, 1937. Type in Herb. Kyôto Imp. Univ.).

The closest ally of Diplazium Mettenianum C. Chr., differing from which by the shape of lamina and pinnæ, and the arrangement of sori. In our species lamina is ovate or broad'y ovate or triangularly ovate, abruptly contracted and caudately long acuminate at apex, pinnæ are narrowly lanceolate, slightly narrowed below, rounded at base (never truncate), and largely crenate-serrate on margin (never pinnatifid), and sori are occupying the lower part of the basal anterior veinlets. In D. Mettenianum C. Chr. lamina is not caudate at apex, pinnæ are hardly narrowed below, truncate at base, and

pinnatifid about half way or more down, and sori are arranged on either side of the lateral main veins.

Diplazium japonicum Bedd. var. yaoshanense Wu from Yaoshan, China, has been referred to D. Fauriei Christ by Christensen¹⁾. Judging from Wu's description and figure it seems to me to be identical with D. Kanasiroi Tagawa. D. Fauriei Christ is, I think, only a variety of D. Mettenianum C Chr., and is quite different from D. Kanasiroi Tagawa.

68. Asplenium austrochinense Ching in Bull. Fan Memor. Inst. Biol. 2: 209. pl. 27 (1931).

Nom. Jap. O-aoganesida, nom. nov.

Hab. Ryûkyû. Isl. Okinawa (Y. Kudô! Aug. 1909).

A new addition to the flora of the Ryûkyû Islands.

69. Asplenium (Euasplenium) pseudo-Wilfordii Tagawa, sp. nov.

Rhizoma erecto-ascendens, cum basibus stipitum squamis brunneis vel castaneis subulatis longe acuminatis integris ad 5 mm longis dense obtectum. Stipes caespitosus, 10–15 cm longus, supra viridis sulcatus, subtus atro-brunneus, ubique parce squamatus dein glabrescens. Lamina anguste lanceolata usque oblongo-lanceolata, acuminata, 18–22 cm longa, 3–5–(6) cm lata, subbipinnatacoriaceo-herbacea, supra glabra, subtus glabrescens; rachide parcissime squa, mata, dein glabrescente, viridi, inferiore subtus saepe atro-brunnea; pinnis ca. 10–15–jugis, alternis raro suboppositis, erecto-ascendentibus, subrhombeo-ovatis vel triangularibus, apice acutis vel obtusis, basi oblique cuneatis, longe petiolatis, cum petiolo 3–5 mm longo 3–4 cm longis, 1–1.5 cm latis, superne pinnati-partitis, inferne pinnatisectis; pinnulis 2–3–jugis, remotis, ascendentibus, cuneatis, apice eroso-crenato-dentatis, pinnulis infimis anterioribus maximis cuneato-rhombeis, 2–3–partitis, segmentis apice eroso-crenato-dentatis. Sori lineares, 2–5 mm longis, indusiis integris.

Nom. Jap. Aoganesida-modoki, nom. nov.

Hab. Honsyû. Prov. Tôtômi: Yamaka-mura, on rocks (J. Sugimoto, No. 27900! Sept. 18, 1933. Type in Herb. Kyôto Imp. Univ.).

¹⁾ Bull. Dept. Biol. Coll. Sci. Sun Yatsen Univ. No. 6, 11 (1933).

Sikoku. Prov. Iyo: Iwaya-dera (S. Yagi! Sept. 23, 1934).

This fern is most closely related to Asplenium Wilfordii METT., from which it is different by the oblong-lanceolate to narrowly lanceolate, subbinnate frond, the obtuse or acute, not long acuminate pinne, the much broader pinnules or ultimate segments, and by the longer sori. Our species is also near to A. austrochinense CHING, but differs in the shape of lamina and pinnæ. A. calcicola H. Itô in Nakai, Ic. Pl. As, Orient. 2, t.4 6(1937), non Tagawa(1935), is unknown to me, but it seems to be a very near species.

70. Pteris (Eupteris) natiensis Tagawa, sp. nov.

Rhizoma breviter repens, apice dense squamatum, frondibus caespitosis. Stipes 30-50 cm longus, viridi-stramineus, glaber, subnitidus, basi rubro-castaneus squamis appressis lineari-subulatis ad 4 mm longis in parte centrali castaneis nitidis rigidis marginali brunneis membranaceis denticulatis vesti-Lamina deltoideo-ovata vel cordata, 20-40 cm longa, 20-30 cm lata, impari-bipin-natipartita, membranacea, laete virens, utrinque glabra; rachide viridi-straminea, glabra, subnitida, supra ad insertionem pinnarum papillesa. Pinnæ fere ad costam pinnati-partitæ; pinna terminali late lanceolata, versus apicem sensim attenuata, apice longe acuminata saepe caudata, basi late cunneata, 15-20 cm longa, supra basin latissima 4-6 cm lata; pinnis lateralibus oppositis, 2-5-jugis, lanceolatis, apice acuminatis saepe caudatis, supra basin latissimis, versus basin truncatas sessile plus minus angustatis, 4-6 cm inter se remotis, pinnis infimis pinnulas 1 basiscopicas in parte inferiore ferentibus (pinnulis pinnis superioribus similibus), pinnis infimis maximis, 15-20 cm longis, 4-5 cm latis. Laciniæ elongato-oblongæ vel lineares, saepe falcatæ, apice rotundatæ vel obtusæ, margine integræ, 5-6 mm latæ, laciniis posterioribus suprabasalibus vel inframedialibus longissimis, 2-4 cm longis. Costæ pinnarum teres, subtus rachide concolores, supra tenuiter sulcatæ ad insertionem costarum laciniarum spinula ornatæ; costis laciniarum supra minus subtus plus elevatis, supra raro parce spinulosis, basi parum decurrentibus, mediis 6-7 mm inter se remotis, venis utrinque plus minusve elevatis, supra basin vel infra medium bifurcatis, ad marginem attingentibus, infimis posterioribus quasi a basi costarum laciniarum parum remotis.

ginem ejus superioribus exclusis occupantes, indusiis ca. 2/3 mm latis, integris, paraphysibus parum brevioribus quam sporangiis.

Nom. Jap. Yawara-hatizyôsida, nom. nov.

Hab. Honsyû. Prov. Kii: Mt. Nati (G. KOIDZUMI! Aug. 3, 1922. Type in Herb. Kyôto Imp. Univ.); ibid. (M. TAGAWA, No. 238! Oct. 14, 1931).

Very near to Pteris Fauriei HIERON., differing from which by the smaller scales, the pale stramineous stipe and rachis, the thin and light green lamina with ampler pinnæ and segmonts:

71) Colysis (Eucolysis) longifrons Tagawa, sp. nov.

Rhizoma longe repens, 3-4 mm crassum, squamis fuscis e basi late ovata longe acuminatis ca. 3 mm longis margine parce denti-culatis basi profunde cordatis dense obtectum, frondibus remotis, erestis, homomorphis. Stipes 20-60 cm longus, 2 mm vel ultra latus, stramineus, nudus, inferiore saepe parcissime squamatus, superiore anguste alatus. Lamina lineari-larceolata, 20-40 cm longa, 3-4 cm medio lata, utraque attenuata, apice longe acuminata raro subcaudato-elongata, basi longe decurrens, margine subintegra vel irregulariter undulata, in sicco chartacea, utrinque glabra, venis lateralibus indistinctis, venatione anastomosanti utrinque non visr. Sori lineares, subflexuosi, continui vel interrupti, suberecto-patentes, 4-6 mm inter se remoti, ad costam marginemque non attingentes.

Nom. Jap. Seitaka-yarinohoran, nom. nov.

Hab. Ryûkyû. Isl. Okinawa: Mt. Nakôsi, Haneti-mura (T. KANASIRO, No. 58! Oct. 10, 1937. Type in Herb. Kyoto Imp. Univ.).

This is near to Colysis Wrightii CHING, but differs from it by the thicker rhizome, the much longer stipe, and by the longer linear-lanceolate lamina, decurrent to the centre of stipe.

En color: The color of the co way way in the first of the case to the first of the case 要 the case of the c

59) 關東州ノ老鐵山ニアル**まんしうくまわらび**へくまわらびDryopterislacera O. KTZE =比較スルト葉柄ヤ中軸=鱗片ガ少ナク、葉片ハ下底ガ最モ廣ク、嚢堆ノ一面=アル先 ノ方ノ羽片ハ縮小セズ、小羽片ハ鈍頭又ハ圓頭デアル。別種ニスル程ノ差デモナイカラ、 くまわらびノ變種=シテ、學名ヲ Dryopteris lacera O. KTZE. var. peninsulæ (KFTA-

- GAWA) TAGAWA トウメタ。 くまわらびノ分布節闡ノ北端ニアル郷種デアルごび まわら がデハ葉柄ヤ中軸ニハ鱗片が密生シ、 葉片ハー般ニ下ノ方がゆシ練クナリン () 双片ハ大 抵鋭頭、孁堆ハ葉片ノ方ニ限ラレ、縮小シタ羽片ノ殆ド全面ヲ占メテ、コノ部分ハぐま わらび獨特ノ姿ヲ早シテキル。
- 60) いはいたちしだ Dryopteris saxifraga H. Itô ハ満洲ニモアル。小林勝氏ガ鳳 鳳山デ採集セラレタ。北川政夫氏がいたちしだト同定セラレタモノハコノ標本デアラウ。 61) とげるので (新稱) Polystichum spinescens TAGAWA, sp. nov. ハ私ガ臺灣 花蓮滞廳下ノタッキリ溪ノ上流ニアル關ケ原、合歡兩駐在所ノ間デ採集シタ種類デアル。 大キサトイヒ、 又形ヤ葉質トイヒ はりゐので一名かたばゐので Polystichum horridipinnum HAYAYA =全クョク似テキルガ、葉柄=アル 鱗片ノ中デ大キナモノハ 卵狀長 精圓形、羽片ノ細脈ハ表カラモ裏カラモ見ルコトガ出來ナイ。 はりみのでデハ葉柄ニ廣 **珈形ノ鱗片ガアリ、羽片ノ細脈ハ凹ンデキルノデ裏面カラハ明暗ニ見エル。又とげあの** でノ葉片ハ下底ガ最モ席イガ、はりゐのでデハ一般ニ葉片ノ下ノ方ガゆシ徠クナツテキ
- 62) **ともちななばけした** (新解) Tectaria Fauriei TAGAWA, Sp. nov. ヘFAURIE ガ 臺灣/萬金庄デ採集シタモノデアル。邦産ノ Tectaria 中デコレニ比較デキルノハななば けしだ Tectaria decurrens COPEL ノミデアルガ、葉質ハズツト灩ク、羽片ハ輻ガ磨 ク、ソノ腋ニハ鱗片デ被ハレタ芽ヲ生ジ、中軸ノ翼ハ羽片ノ腋ノ直上デ中斷セラレ(即 い遙ニ小サクテ主側脈ノ間ニ不規則ニ散在シテキル。

ル。兩種共二高山ノ岩ノ破目ナドニ生育シテキル。

- 63-65) しけしだ及ビソレニ近緣ノ種類ハ臺堆ノ形狀ノミヲ考慮シテ Diplazium ニ入 レテアルガ、コレラハ鱗片ソノ他嚢堆以外ノ性質ヲモ合セ考ヘルト、Athyrium ニ入レ ル方ガヨイト思ハレル。「ソレデしけしだハ Athyrium japonicum (Thune.) Copen. ほ そばしけしだハ A. Conilii (Fr. et Sav.) TAGAWA, 鱗片ノ少イソノ變種ハ A. Conilii var. Oldhami (Hook. et Bak.) Tagawa, せいたかしけしたへ A. dimorphophyllum (KOIDZ.) TAGAWA, なくげしけしだハ A. kiusianum (KOIDZ.) TAGAWA ガ夫々ノ學名 トナル。
- Diplazium japonicum var. latipes Rosenst. ハ櫻井半三郎氏ガ東京デ採集シタモノ デアルガ、コレハ最下ノ羽片ガ目立ツテ長イモノデ、ほそばしけしだノ一型ニスギス。
- 166) かりらいいぬわらび一名たいめしだ Athyrium coreanum Christ ハおほめし だ A. pterorachis Christ =一番近イ種類デアルガ、葉ハ小サク、葉柄=ハ鱗片ガ少ナ ク、羽片へ狹ク、裂片ノ切込へ殘クテ鈍鋸齒緣ノ程度デアリ、裂片ノ側脈へ單一又ハ二岐 シテキル。朝鮮デ發見セラレタモノデアルガ、南滿洲ノ鳳凰山(小林勝氏採集)ヤシベ リヤ東部ニモアリ、南下シテハ對馬ノ御嶽(中島一男氏採集)、豐前國宇佐町宇佐神宮ノ 奥ニアル御許山 (渡邊某氏採集)、又遠クハナレテ下野國鹽原附近 (關本平八氏採集) = モアル。

- 67) **ほとざきのとぎりしだ**(新稱) Diplazium Kanasiroi Tagawa, sp. nov. ハ金城 鐵郎氏 ガ沖繩?
 郊地村源河山デ發見セラレタ新種デアル。みやまのこぎりしだ D. Mettenianum C. Chr. =最モ近イ種類デアルガ、葉片へ卵形度卵形又へ三角狀卵形、先ノ方 ハ急ニ細クナツテ尾狀ニ伸長シ、羽片ハ狹披針形デ下部ハ少シリ狹クナ基脚へ圓形、大キナ鈍鋸歯ガアリ、嚢堆ハ最下前側ノ細脈ノ下部ニアリ長サ 10 mm =達シ彎曲シテキル。みやまのこぎりしだデハ葉片ノ先ハ決シテ尾狀ニ伸長セズ、羽片ノ下部殆ド狹クナラズ、基脚ハ截形、嚢堆へ側脈ノ兩側ニアル。
 曾テ昊印禪氏ガ記載シタモノ = Diplazium japonicum var. yaoshanense Wu ト云フモノガアル。コレハ廣西省瑤山ノモノデ、勿論しけしだノ變種デハナイ。
 CHRISTENSEN 氏ハほそばのこぎりしだ Diplazium Fauriei CHRISTト考へテキルガ、吳氏ノ記相文ヤ圖カラ判斷スルト、ほこざきのこぎりしだデハナイカト思フ。ほそばのこぎりしだノ羽片ノ幅ノ狭イ一型ニスギス。
- 68) 南支那ノ Asplenium austrochinense CHING ハ沖縄ニモアル。故工藤祐舜博士ノ採集。おほあをがねしだト命名ショウ。あをがねしだ A. Wilfordii METT. ニ近縁ノ種類デ葉片ヤ羽片ノ輪廓ハョク似テキルガ、2 回羽狀複生デアルカラ裂片ノ幅ハズット廣イ。あをがねしだハ 3-4 回羽狀ニ分裂シテキルカラ裂片ノ幅ハ狹イ。
- 69) **あをがねしだもどき**(新稱) Asplenium pseudo-Wilfordii Tagawa, sp. nov ハあをがねしだニ似テキルガ薬片ハ狭クテ長精圓狀披針形乃至狭披針形、2 同羽狀分裂、羽片ハ鋭頭又ハ鈍頭デ決シテ鋭尖頭デナク、小羽片ハソノ幅遙カニ廣ク、嚢堆モズツト長イ。おほあをがねしだニモ似テキルガ薬片ト羽片ノ形トガ一致シナイ。原標本ハ杉本順一氏ガ遠江國香山村デ採集セラレタ No. 27900 デアル。八木繁一氏ガ伊豫國上浮穴郡岩屋寺デ採集セラレタ標本モアル。
- 70) **やはらはちじやうしだ**(新稱) Pteris nationsis TAGAWA sp. nov. ハ紀州那智山ノ森林中デ小泉先生ノ採集セラレタモノデアル。はちじやうしだ P. Fauriei HIERON. ニ近縁ノモノデアルガ、葉柄ノ基部ニアル鱗片ハ小サク、葉柄ヤ中軸ハ帶緑淡黄色、葉片ハ質薄ク軟ク、羽片ヤ裂片ハ廣濶デアル。
- 71) せいたかやりのほらん(新稱)Colysis longifrons Tagawa sp. nov. ハ金城鐵郎氏ガ沖縄ノ羽地村仲尾次山デ採集セラレ新種デアル。やりのほらん C. Wrightii Ching ニ近イ種類デアルガ、根莖ハ太クテ徑 3-4 mm 葉ハズット長クテ時ニ 1m ニ達シ、葉柄ハ 20-60 cm 葉片ハ線狀披針形デ長サ 20-40 cm 中央ガ最モ廣クテ 3-4 cm 先ハ長ク失り、基部ハ流レテ葉柄ノ上部ニ狭イ翼ヲナシ、乾燥シテモ黑クナラナイ。又しんてんららぼし C. shintenensis H. Irô ニ比較スルト、葉片ハ狭ク、不規則ニ羽狀ニ分裂スルヤウナコトハナク、主側脈モ顯著デハナイ。